

RECEIVED  
CENTRAL FAX CENTER

10/583,121

APR 09 2010

1.-13. (CANCELED)

14. (CURRENTLY AMENDED) A method for manufacturing a nano-particulate electrode for Dye Solar Cells including the steps of:

providing an electrically conductive substrate,

forming a nano-particulate layer on the substrate,

applying a dye to the nano-particulate layer; and

an additional step of electrolytically treating treatment of the nano-particulate layer in an electrolyte.

15. (PREVIOUSLY PRESENTED) The method according the claim 14, further comprising the step of the electrolyte containing ions chemically different to the nano-particulate layer and the electrolytic treatment step comprises transferring material from the electrolyte in the form of ions into the surface of the nano-particulate layer resulting in formation of a barrier-layer, electronic properties of which differ from that of the original nano-particulate layer.

16. (CURRENTLY AMENDED) The method according to claim [[14]] 15, further comprising the step of heating to ensure stable bonding of the barrier layer to the nano-particulate layer, following the electrolytic treatment step.

17. (CURRENTLY AMENDED) The method according to claim [[13]] 14, further comprising the step of ~~partial removal of~~ partially removing material from the nano-particulate layer to the electrolyte during the electrolytic treatment step.

18. (CURRENTLY AMENDED) The method according to claim [[13]] 14, further comprising the step of containing ions of UV, visual light and/or Infra red absorbing material in the electrolyte.

19. (CURRENTLY AMENDED) The method according to claim [[17]] 18, further comprising the step of using dye as the absorbing material.

20. (PREVIOUSLY PRESENTED) The method according to claim 14, further comprising the step of using a metal or a mixed metal oxide as the nano-particulate layer.

21. (PREVIOUSLY PRESENTED) The method according the claim 20, further comprising the step of using titanium dioxide as the metal oxide.

22. (CURRENTLY AMENDED) A method for manufacturing nano-particulate electrode for Dye Solar Cells (DSC) including the steps of:

10/583,121

providing a substrate, and  
electrolytically depositing deposition of the nano-particulate layer from an  
electrolyte and application of dye to the nano-particulate layer.

23. (CURRENTLY AMENDED) The method according to claim 14, further  
comprising the step of the electrolytic treatment electrolytically treating including at least  
one step of transfer of a predetermined amount of electrical charge between the  
electrolyte and the nano-particulate layer.

24. (PREVIOUSLY PRESENTED) The method according to claim 23, further  
comprising the steps of transferring the charge under constant current conditions with  
imposed voltage limits, such as when voltage reaches the imposed limit a control  
circuitry switches from the constant current to the constant voltage mode, keeping the  
constant voltage mode until either the current drops below a predetermined current  
value or the predetermined amount of electrical charge has passed between the  
electrolyte solution and the nano-particulate electrode.

25. (CURRENTLY AMENDED) The method according to claim 23, further  
comprising the step of the electrolytic treatment electrolytically treating including at least  
first and second half-cycles, each transferring the predetermined amount of charge; in  
the first half-cycle the charge is transferred by movement of ions from the electrolyte  
to the nano-particulate layer, in the second half-cycle the charge is transferred by  
movement of ions from the nano-particulate layer to the electrolyte.

26. (CURRENTLY AMENDED) The method according to claim 25, further  
comprising the step of the electrolytic treatment electrolytically treating including at least  
first and second cycles and a predetermined charge in the second cycle is larger than  
in the first cycle.